



PATENT  
Attorney Docket No. ASC-023DVC2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Fitzgerald  
SERIAL NO.: 10/022,689 GROUP NO.: 2813  
FILING DATE: December 17, 2001 EXAMINER: Laura M. Schillinger  
TITLE: CONTROLLING THREADING DISLOCATION DENSITIES IN Ge  
ON Si USING GRADED GeSi LAYERS AND PLANARIZATION

Mail Stop: Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. Copies of the patents and publications are enclosed. Please note that reference A126 has previously been cited to the U.S. Patent and Trademark Office by its U.S. patent application serial number in an Information Disclosure Statement filed for the above-referenced application

**REMARKS**

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

- (1) within three (3) months of the **filing date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office action** on the merits, or before the mailing of a **first Office action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or
- (2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and
- the requisite Statement is below, OR

- the requisite fee under 37 C.F.R. 1.17(p), namely \$180.00, is included herein, or
- (3) after the mailing date of a **final action or notice of allowance** but before the payment of the **issue fee**, **AND**
- the requisite Statement is below, **AND**
- the requisite petition fee under 37 C.F.R. 1.17(p), namely \$180.00 is included herein.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

In addition, Applicants wish to inform the Examiner about the following co-pending patent applications and Office actions issued therein:

- 1) U.S. Patent No. 6,232,138, U.S.S.N. 09/198,960 (Docket No. ASC-024DV), filed 11/24/98 by Fitzgerald *et al.*;
- 2) U.S. Patent No. 6,521,041, U.S.S.N. 09/289,514 (Docket No. ASC-022), filed 04/09/99 by Wu *et al.*;
- 3) U.S. Patent No. 6,555,839, U.S.S.N. 09/859,138 (Docket No. ASC-035), filed 5/16/01 by Fitzgerald;
- 4) U.S. Patent No. 6,5830151, U.S.S.N. 09/923,207 (Docket No. ASC-042), filed 8/06/01 by Fitzgerald *et al.*;
- 5) U.S. Patent No. 6,593,191, U.S.S.N. 09/859,137 (Docket No. ASC-036), filed 1/17/01 by Fitzgerald;
- 6) U.S. Patent No. 6,646,322, U.S.S.N. 09/906,438 (Docket No. ASC-051), filed 7/16/01 by Fitzgerald;
- 7) U.S. Patent No. 6,730,551, U.S.S.N. 10/211,126 (Docket No. ASC-012), filed 8/02/02 by Lee *et al.*;
- 8) U.S. Publication No. 2002/0123167, U.S.S.N. 09/906,534 (Docket No. ASC-054), filed 7/16/01 by Fitzgerald;
- 9) U.S. Publication No. 2002/0123183, U.S.S.N. 09/906,533 (Docket No. ASC-052), filed 7/16/01 by Fitzgerald;
- 10) U.S. Publication No. 2002/0168864, U.S.S.N. 10/116,559 (Docket No. ASC-026), filed 4/04/02 by Cheng *et al.*;
- 11) U.S. Publication No. 2003/0013323, U.S.S.N. 10/172,542 (Docket No. ASC-057), filed 6/14/02 by Hammond *et al.*;
- 12) U.S. Publication No. 2003/0057439, U.S.S.N. 10/216,085 (Docket No. ASC-015), filed 8/09/02 by Fitzgerald;
- 13) U.S. Serial No. 10/774,890 (Docket No. ASC-049C1), filed 2/9/04 by Fitzgerald;
- 14) U.S. Serial No. 10/802,185 (Docket No. ASC-025DVC1) filed on 03/17/2004, by Cheng *et al.*;
- 15) U.S. Serial No. 10/802,186 (Docket No. ASC-025DV2C1) filed on 03/17/2004, by Cheng *et al.*;

- 16) U.S. Serial No. 10/826,156 (Docket No. ASC-023C2) filed on 04/16/2004, by Fitzgerald; and  
17) U.S. Serial No. 10/854,556 (Docket No. ASC-054C1), filed 5/26/04, by Fitzgerald.

Respectfully submitted,

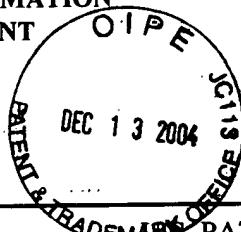
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FORM PTO - 1449

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT

ATTY DOCKET NO.: ASC-23DVC2

APPLICANT(S): Fitzgerald

SERIAL NO.: 10/022,689

FILING DATE: December 17, 2001

GROUP: 2813

## B. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A121	4,969,031	11/06/1990	Kobayashi <i>et al.</i>			
	A122	5,240,876	08/31/1993	Gaul <i>et al.</i>			
	A123	5,548,128	08/20/1996	Soref <i>et al.</i>			
	A124	5,572,043	11/05/1996	Shimizu <i>et al.</i>			
	A125	5,607,876	03/04/1997	Biegelsen <i>et al.</i>			
	A126	6,352,909	03/05/2002	Usenko			05/26/2000
	A127	6,372,593	04/16/2002	Hattori <i>et al.</i>			07/19/2000
	A128	6,489,639	12/03/2002	Hoke <i>et al.</i>			05/24/2000
	A129	6,524,935	02/25/2003	Canaperi <i>et al.</i>			09/29/2000
	A130	6,646,322	11/11/2003	Fitzgerald			07/16/2001
	A131	6,677,192	01/13/2004	Fitzgerald			07/16/2001
	A132	6,703,688	03/09/2004	Fitzgerald			07/16/2001
	A133	6,750,130	06/15/2004	Fitzgerald			01/07/2001

## FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B40	61-141116	06/28/1986	JP					Y (abstract only)
	B41	2-210816	08/22/1990	JP					Y (abstract only)
	B42	3-036717	02/18/1991	JP					Y

## OTHER ART, JOURNAL ARTICLES

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)		
	C95	Godbey <i>et al.</i> , (1990) "Fabrication of Bond and Etch-Back Silicon Insulator Using a Strained Si <sub>0.7</sub> Ge <sub>0.3</sub> Layer as an Etch Stop," <i>Journal of the Electrical Society</i> , Vol. 137, No. 10 (October 1990) pp. 3219-3223.	
	C96	Grillot <i>et al.</i> , "Acceptor diffusion and segregation in (Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>0.5</sub> In <sub>0.5</sub> P heterostructures," <i>Journal of Applied Physics</i> , Vol. 91, No. 8 (2002), pp. 4891-4899.	

EXAMINER

DATE CONSIDERED

449	ATTY DOCKET NO.: ASC-23DVC2
<b>SUPPLEMENTAL INFORMATION E DISCLOSURE STATEMENT</b>	
DEC 13 2004 PATENT & TRADEMARK OFFICE U.S.	
SERIAL NO.: 10/022,689	FILING DATE: December 17, 2001
GROUP: 2813	

## U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)

## OTHER ART, JOURNAL ARTICLES

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
	C97	Halsall <i>et al.</i> , "Electron diffraction and Raman studies of the effect of substrate misorientation on ordering in the AlGaNp system," <u>Journal of Applied Physics</u> , Vol. 85, No. 1 (1999), pp. 199-202.
	C98	Hsu <i>et al.</i> , "Surface morphology of related Ge <sub>x</sub> Si <sub>1-x</sub> films," <u>Appl. Phys. Lett.</u> , Vol. 61, No. 11 (1992), pp. 1293-1295
	C99	Huang <i>et al.</i> , (2001) "Carrier Mobility enhancement in strained Si-on-insulator fabricated by wafer bonding", <u>2001 Symposium on VLSI Technology, Digest of Technical Papers</u> , pages 57-58
	C100	Langdo <i>et al.</i> , (2002) "Preparation of Novel SiGe-free Strained Si on Insulator Substrates" <u>IEEE International SOI Conference</u> , pages 211-212 (XP002263057)

EXAMINER	DATE CONSIDERED
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